

**Exhibit 12 to Complaint**  
**Intellectual Ventures I LLC and Intellectual Ventures II LLC**

**Example Southwest Count 5 Systems and Services**  
**U.S. Patent No. 7,324,469 (“469 Patent”)**

The Accused Systems and Services include without limitation Southwest systems and services that provide onboard WiFi in its airplanes; all past, current, and future systems and services that operate in the same or substantially similar manner as the specifically identified systems and services; and all past, current, and future Southwest systems and services that have the same or substantially similar features as the specifically identified systems and services (“Example Southwest Count 5 Systems and Services” or “Southwest Systems and Services”).

On information and belief, the Southwest Systems and Services provide onboard WiFi in its airplanes.

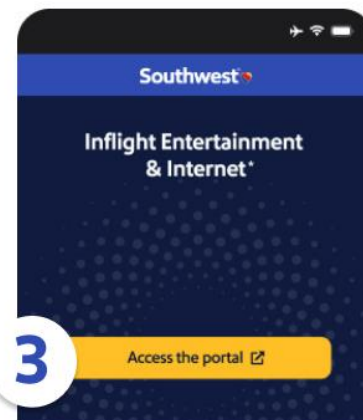
### How to Get Connected ^



Head to **Settings**.  
Turn on Airplane mode.



Turn on Wi-Fi.  
Choose **SouthwestWiFi** from the WiFi network list.



Tap Access the portal or open **SouthwestWiFi.com** in your browser directly.

Source: <https://www.southwest.com/inflight-entertainment-portal/>.<sup>1</sup>

<sup>1</sup> All sources cited in this document were publicly accessible as of the filing date of the Complaint.

We're excited to announce that as of yesterday, March 9, 2023, our first aircraft equipped with hardware from our new WiFi vendor, Viasat, has entered service. Viasat is an industry leader, and we're excited about the increased connectivity and reliability that Viasat will provide. As we prepare for additional Viasat-equipped aircraft deliveries, we're also making significant progress updating our existing fleet with new Anuvu hardware (our original WiFi vendor). We have now upgraded more than 400 aircraft and are well on our way to upgrading the entire fleet by the third quarter of this year.

Between our upgraded Anuvu hardware and integration of Viasat, we're bringing a faster, more reliable WiFi experience. In addition to improved WiFi quality, Viasat offers Customers the ability to trade paid internet connectivity between personal devices (known as "device swapping"). For example, if a Customer has paid for Internet using their laptop, they can use the "swap device" function in the Inflight Entertainment Portal to switch connectivity to their phone.

	Anuvu Legacy	Anuvu Upgraded	Viasat
Improved Speeds and Reliability	✗	✓	✓
Streaming (when authenticated for Internet)	✗	✓	✓
Device Swap	✗	✗	✓
Free Entertainment, Texting, and Flight Tracker	✓	✓	✓

Source: <https://www.swamedia.com/southwest-stories/wifi-modernization-first-viasat-aircraft-enters-service-MC5XTXWTTLWNESJDQR4LZQBIDI2I>.

U.S. Patent No. 7,324,469 (Claim 24)																						
Claim(s)	Example Southwest Count 5 Systems and Services																					
[24.pre] An Internet Hotspot comprising:	To the extent this preamble is limiting, on information and belief, the Southwest Count 5 Systems and Services include an Internet Hotspot.																					
	On information and belief, Southwest has partnered with Viasat and Anuvu <sup>2</sup> to provide its passengers with in-flight Wi-Fi connectivity. Southwest aircraft are equipped with Viasat and Anuvu’s In-Flight Connectivity system.																					
	We’re excited to announce that as of yesterday, March 9, 2023, our first aircraft equipped with hardware from our new WiFi vendor, Viasat, has entered service. Viasat is an industry leader, and we’re excited about the increased connectivity and reliability that Viasat will provide. As we prepare for additional Viasat-equipped aircraft deliveries, we’re also making significant progress updating our existing fleet with new Anuvu hardware (our original WiFi vendor). We have now upgraded more than 400 aircraft and are well on our way to upgrading the entire fleet by the third quarter of this year.																					
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<sup>2</sup> Based on publicly-available information, Plaintiffs have identified Viasat and Anuvu as Wi-Fi and/or In-Flight Connectivity (IFC) providers for Southwest. To the extent Southwest has used other IFC providers to provide satellite-based Internet connectivity to its customers, Plaintiffs reserve right to investigate such use.

U.S. Patent No. 7,324,469 (Claim 24)	
Claim(s)	Example Southwest Count 5 Systems and Services
	<p><b>DOES SOUTHWEST USE VIASAT?</b></p> <p>Yes. Southwest airlines announced in March 2023 that new aircraft with the airline will come with factory-installed Wi-Fi connectivity powered by Viasat. The Ka-band connectivity will offer faster, reliable Wi-Fi network connections for Southwest passengers. Viasat currently offers In-Flight Connectivity services to Delta Air Lines, JetBlue, American and United. The first Viasat-equipped aircraft entered service in March 2023 for various North American routes. Viasat is proud to have been selected as the provider in this partnership.</p> <p>The connectivity will use three large Ka-band satellites, Viasat-1, Viasat-2 and the recently launched Viasat-3 once it completes in-orbit testing, which is expected to be late summer or the fall of 2023. Viasat is a global communications company that provides high-speed satellite internet and other communication services. It operates a satellite network that delivers broadband internet access to residential, commercial, and government customers, particularly in areas where traditional wired internet infrastructure is limited or unavailable.</p> <p>Source: <a href="https://www.rsinc.com/does-southwest-use-viasat.php">https://www.rsinc.com/does-southwest-use-viasat.php</a>.</p> <p>Southwest, serving more than 100 million passengers each year, continues to offer the most comprehensive inflight entertainment and connectivity experience at all phases of flight, which now includes:</p> <ul style="list-style-type: none"> <li>• Inflight WiFi available from gate-to-gate for \$8 per device per day</li> <li>• iMessage, available from gate-to-gate for \$2 per day, for iPhone users with iOS5 or later</li> <li>• Live Television streamed directly to passengers' own personal electronic devices, free of charge, courtesy of DISH</li> <li>• Video-on-Demand television content and movies</li> </ul> <p>Powered by Global Eagle's satellite-based connectivity platform, the new service—in sync with gate-to-gate Wi-Fi—is also optimized to work in all phases of flight, including on the ground.</p> <p>Source: <a href="https://www.anuvu.com/our-company/press-releases/detail/30/southwest-airlines-and-global-eagle-entertainment-announce-launch-of-gate-to-gate-messaging-on-all">https://www.anuvu.com/our-company/press-releases/detail/30/southwest-airlines-and-global-eagle-entertainment-announce-launch-of-gate-to-gate-messaging-on-all</a>.</p>

U.S. Patent No. 7,324,469 (Claim 24)																						
Claim(s)	Example Southwest Count 5 Systems and Services																					
[24.a] a satellite dish communicating with the Internet via one or more data links with a satellite;	On information and belief, the Southwest Count 5 Systems and Services include a satellite dish communicating with the Internet via one or more data links with a satellite.																					
	On information and belief, Southwest’s aircraft are equipped with Viasat In-Flight Connectivity (IFC). This functionality uses satellite technology that communicates with the Internet through data links.																					
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Claim(s)	Example Southwest Count 5 Systems and Services
	<p><b>DOES SOUTHWEST USE VIASAT?</b></p> <p>Yes. Southwest airlines announced in March 2023 that new aircraft with the airline will come with factory-installed Wi-Fi connectivity powered by Viasat. The Ka-band connectivity will offer faster, reliable Wi-Fi network connections for Southwest passengers. Viasat currently offers In-Flight Connectivity services to Delta Air Lines, JetBlue, American and United. The first Viasat-equipped aircraft entered service in March 2023 for various North American routes. Viasat is proud to have been selected as the provider in this partnership.</p> <p>The connectivity will use three large Ka-band satellites, Viasat-1, Viasat-2 and the recently launched Viasat-3 once it completes in-orbit testing, which is expected to be late summer or the fall of 2023. Viasat is a global communications company that provides high-speed satellite internet and other communication services. It operates a satellite network that delivers broadband internet access to residential, commercial, and government customers, particularly in areas where traditional wired internet infrastructure is limited or unavailable.</p> <p>Source: <a href="https://www.rsinc.com/does-southwest-use-viasat.php">https://www.rsinc.com/does-southwest-use-viasat.php</a>.</p> <p>ViaSat-3 is a constellation of three ultra-high-capacity Ka-band geostationary satellites currently in production. The first and second payloads have already been sent to Boeing Satellite Systems for integration with the 702MP+ bus (spacecraft). This is a modified version of Boeing's 702 bus with a good deal more power (greater than 25kW per satellite), and they are expected to make the ViaSat-3 satellites some of the most high-powered ones ever built. To produce that power, the four solar panels of the traditional 702MP have been bumped to eight. These solar cells are similar to the ones used in the original Apollo moon missions and have powered more than 1,000 satellites around the globe.</p> <p>Source: <a href="https://news.viasat.com/blog/scn/what-is-viasat3">https://news.viasat.com/blog/scn/what-is-viasat3</a>.</p>

U.S. Patent No. 7,324,469 (Claim 24)

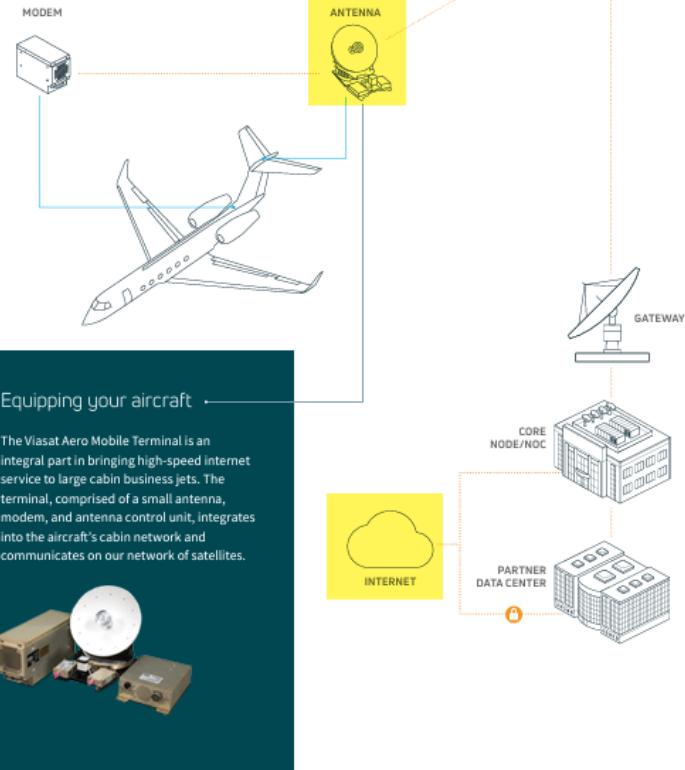
Claim(s)

Example Southwest Count 5 Systems and Services

How it works

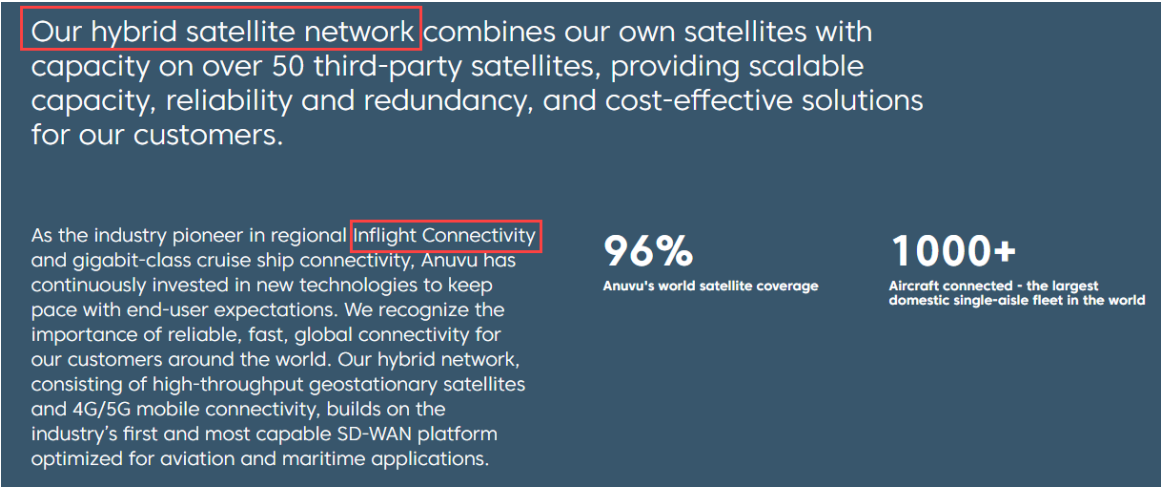

The service uses satellites to transmit data to and from the aircraft. Passengers connect their devices to the Viasat service through aircraft cabin WiFi distribution similar to how they connect to hotspots on the ground. Data is transmitted between the plane and the ground station through the satellite. As the plane moves through the air, the system automatically performs handovers between coverage areas.

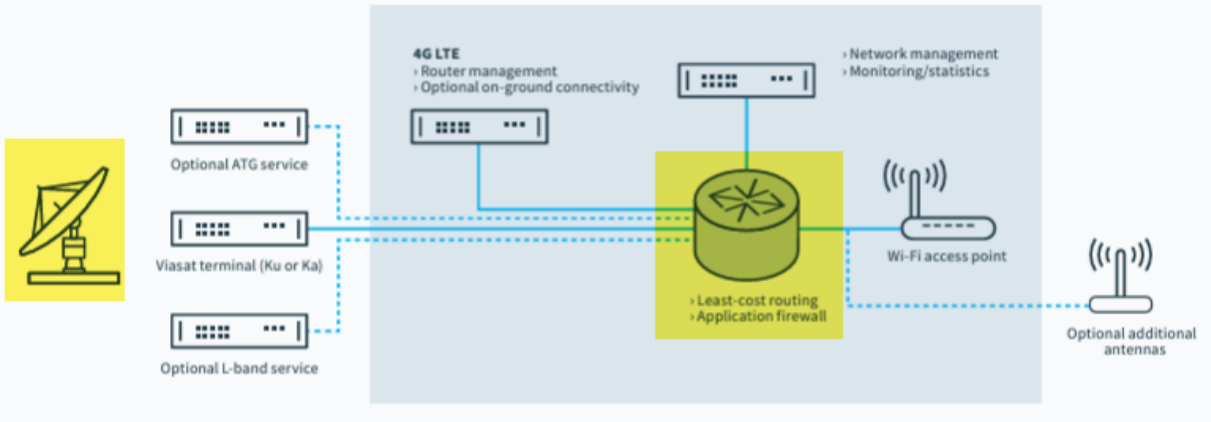
Viasat equipment and network



Source: [https://www.viasat.com/content/dam/us-site/aviation/documents/932043\\_Global\\_Ku-band\\_Advanced\\_Brochure\\_016\\_web.pdf](https://www.viasat.com/content/dam/us-site/aviation/documents/932043_Global_Ku-band_Advanced_Brochure_016_web.pdf).



U.S. Patent No. 7,324,469 (Claim 24)	
Claim(s)	Example Southwest Count 5 Systems and Services
	<p>On information and belief, Anuvu functions similarly to Viasat.</p>  <p>Our hybrid satellite network combines our own satellites with capacity on over 50 third-party satellites, providing scalable capacity, reliability and redundancy, and cost-effective solutions for our customers.</p> <p>As the industry pioneer in regional <b>inflight connectivity</b> and gigabit-class cruise ship connectivity, Anuvu has continuously invested in new technologies to keep pace with end-user expectations. We recognize the importance of reliable, fast, global connectivity for our customers around the world. Our hybrid network, consisting of high-throughput geostationary satellites and 4G/5G mobile connectivity, builds on the industry's first and most capable SD-WAN platform optimized for aviation and maritime applications.</p> <p><b>96%</b> Anuvu's world satellite coverage</p> <p><b>1000+</b> Aircraft connected - the largest domestic single-aisle fleet in the world</p> <p>Source: <a href="https://www.anuvu.com/our-portfolio/connectivity">https://www.anuvu.com/our-portfolio/connectivity</a>.</p>
[24.b] at least one router operatively coupled to the satellite dish;	<p>On information and belief, the Southwest Count 5 Systems and Services include at least one router operatively coupled to the satellite dish.</p> <p>On information and belief, Southwest's aircraft are equipped with Wi-Fi and/or IFC that includes a router that is connected to a satellite antenna mounted about the plane that communicates using a satellite and ground stations.</p>  <p>Viasat Select Router</p> <p>Redefining the in-flight connectivity experience</p>

U.S. Patent No. 7,324,469 (Claim 24)	
Claim(s)	Example Southwest Count 5 Systems and Services
	 <p>The diagram illustrates a network architecture for a Southwest Count 5 system. On the left, a satellite dish icon is connected to three optional services: 'Optional ATG service', 'Viasat terminal (Ku or Ka)', and 'Optional L-band service'. These services connect to a central '4G LTE' block. The '4G LTE' block contains a 'Router management' unit with 'Optional on-ground connectivity' and a 'Network management' unit with 'Monitoring/statistics'. A central router unit is highlighted in yellow, featuring 'Least-cost routing' and 'Application firewall' functions. This router connects to a 'Wi-Fi access point' and an 'Optional additional antennas' unit. The entire system is enclosed in a light blue box.</p> <p>Source: <a href="https://www.viasat.com/content/dam/us-site/aviation/documents/Viasat_Select_Router-datasheet.pdf">https://www.viasat.com/content/dam/us-site/aviation/documents/Viasat_Select_Router-datasheet.pdf</a>.</p>

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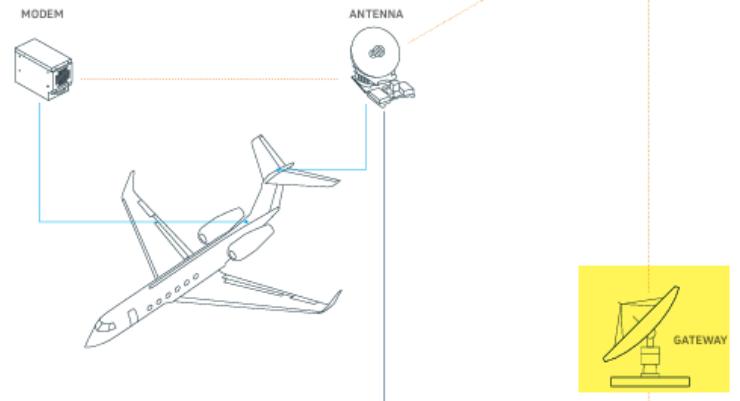
## Claim(s)

## Example Southwest Count 5 Systems and Services


**How it works**

The service uses satellites to transmit data to and from the aircraft. Passengers connect their devices to the Viasat service through aircraft cabin WiFi distribution similar to how they connect to hotspots on the ground. Data is transmitted between the plane and the ground station through the satellite. As the plane moves through the air, the system automatically performs handovers between coverage areas.

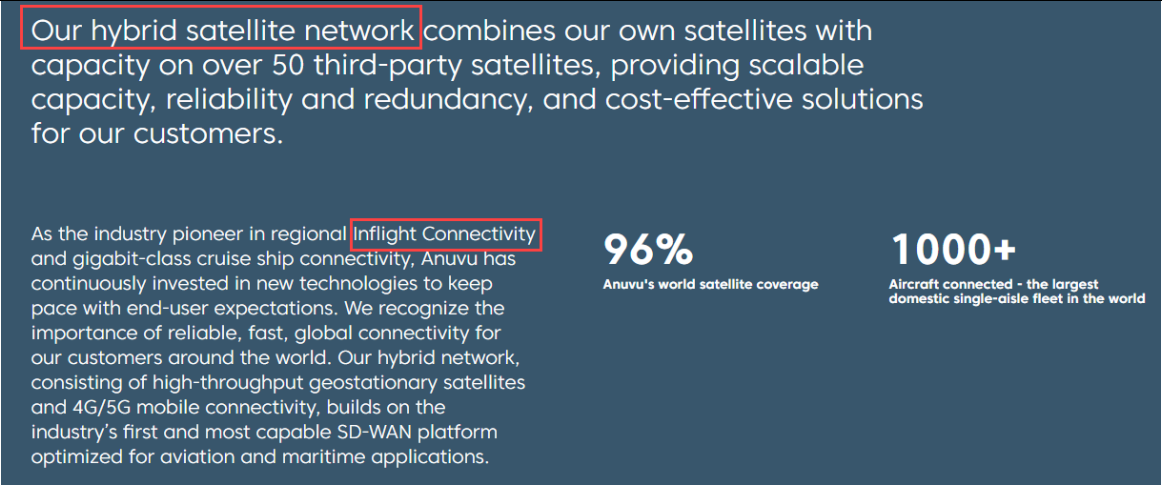
Viasat equipment and network

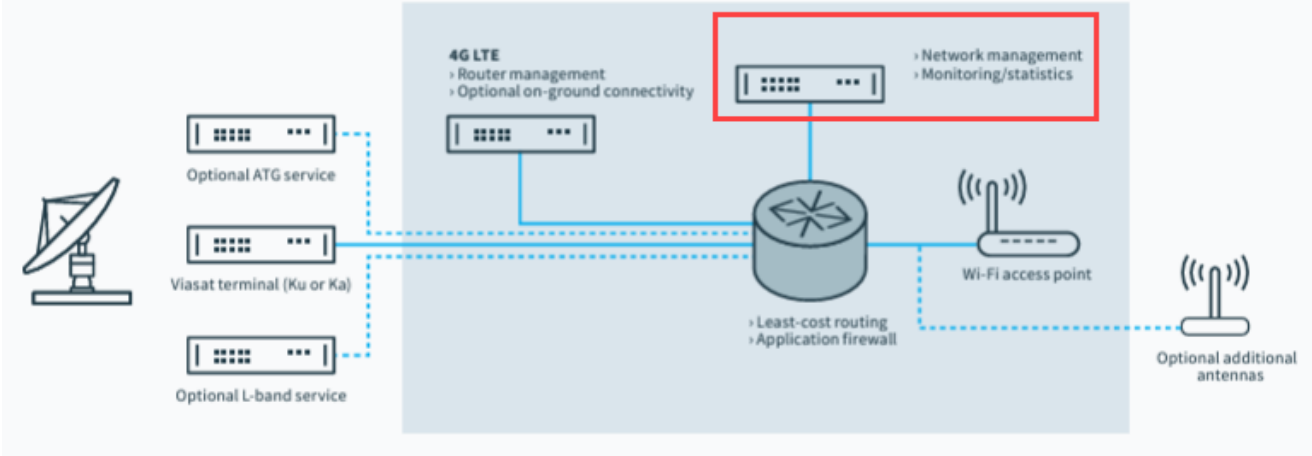


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U.S. Patent No. 7,324,469 (Claim 24)	
Claim(s)	Example Southwest Count 5 Systems and Services
	 <p>Key features at a glance</p> <ul style="list-style-type: none"> <li>› Smart, fully automated, multi-link cabin connectivity management</li> <li>› Integral 4G/LTE cellular data modem for quick and easy remote support</li> <li>› Small form factor, flange mounted, fan-less design for maximum flexibility and ease of installation</li> <li>› Built-in monitoring and diagnostics</li> <li>› Front panel I/O includes dual mini-SIM slot, USB, serial, Ethernet and DisplayPort allowing for easy maintenance access</li> </ul> <p>Source: <a href="https://www.viasat.com/content/dam/us-site/aviation/documents/Viasat_Select_Router-datasheet.pdf">https://www.viasat.com/content/dam/us-site/aviation/documents/Viasat_Select_Router-datasheet.pdf</a>.</p> <p>On information and belief, Southwest offers WiFi solutions (through its IFC providers) that support satellite-based WiFi.</p> <p>We're excited to announce that as of yesterday, March 9, 2023, our first aircraft equipped with hardware from our new WiFi vendor, Viasat, has entered service. Viasat is an industry leader, and we're excited about the increased connectivity and reliability that Viasat will provide. As we prepare for additional Viasat-equipped aircraft deliveries, we're also making significant progress updating our existing fleet with new Anuvu hardware (our original WiFi vendor). We have now upgraded more than 400 aircraft and are well on our way to upgrading the entire fleet by the third quarter of this year.</p> <p>Between our upgraded Anuvu hardware and integration of Viasat, we're bringing a faster, more reliable WiFi experience. In addition to improved WiFi quality, Viasat offers Customers the ability to trade paid internet connectivity between personal devices (known as "device swapping"). For example, if a Customer has paid for Internet using their laptop, they can use the "swap device" function in the Inflight Entertainment Portal to switch connectivity to their phone.</p>

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	Device Swap	✗	✗	✓
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	 <p>Our hybrid satellite network combines our own satellites with capacity on over 50 third-party satellites, providing scalable capacity, reliability and redundancy, and cost-effective solutions for our customers.</p> <p>As the industry pioneer in regional inflight Connectivity and gigabit-class cruise ship connectivity, Anuvu has continuously invested in new technologies to keep pace with end-user expectations. We recognize the importance of reliable, fast, global connectivity for our customers around the world. Our hybrid network, consisting of high-throughput geostationary satellites and 4G/5G mobile connectivity, builds on the industry's first and most capable SD-WAN platform optimized for aviation and maritime applications.</p> <p><b>96%</b> Anuvu's world satellite coverage</p> <p><b>1000+</b> Aircraft connected - the largest domestic single-aisle fleet in the world</p> <p>Source: <a href="https://www.anuvu.com/our-portfolio/connectivity">https://www.anuvu.com/our-portfolio/connectivity</a>.</p>
[24.c] a subscriber access unit operatively coupled between the satellite dish and the at least one router, the subscriber access unit being capable of authenticating a subscription account associated with a user prior to allowing the user access to the Internet; and	<p>On information and belief, the Southwest Count 5 Systems and Services include a subscriber access unit operatively coupled between the satellite dish and the at least one router, the subscriber access unit being capable of authenticating a subscription account associated with a user prior to allowing the user access to the Internet.</p> <p>On information and belief, the IFC includes a satellite antenna, multiple WAPs, and an onboard server that hosts information passenger-focused services.</p>

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Claim(s)	Example Southwest Count 5 Systems and Services
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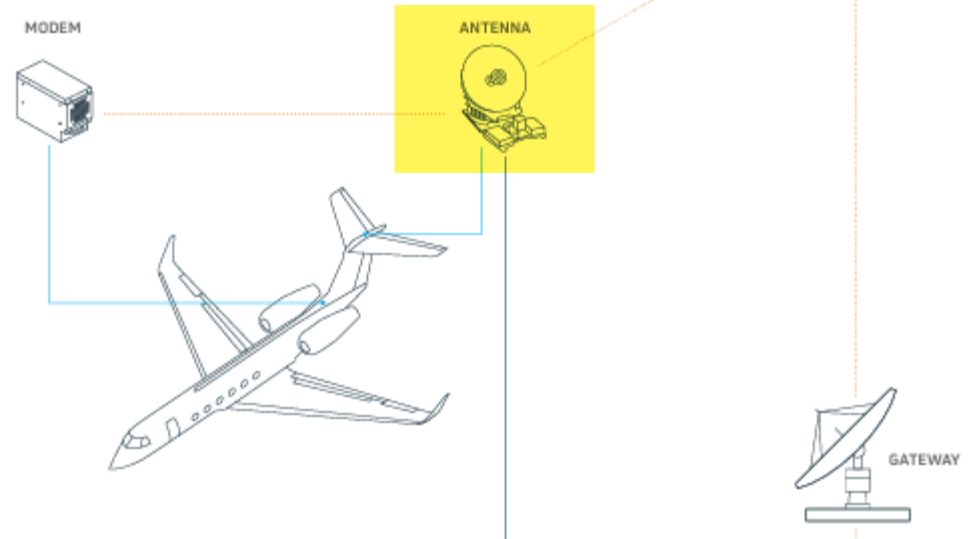
## Claim(s)

## Example Southwest Count 5 Systems and Services

**How it works**

The service uses satellites to transmit data to and from the aircraft. Passengers connect their devices to the Viasat service through aircraft cabin WiFi distribution similar to how they connect to hotspots on the ground. Data is transmitted between the plane and the ground station through the satellite. As the plane moves through the air, the system automatically performs handovers between coverage areas.


## Viasat equipment and network

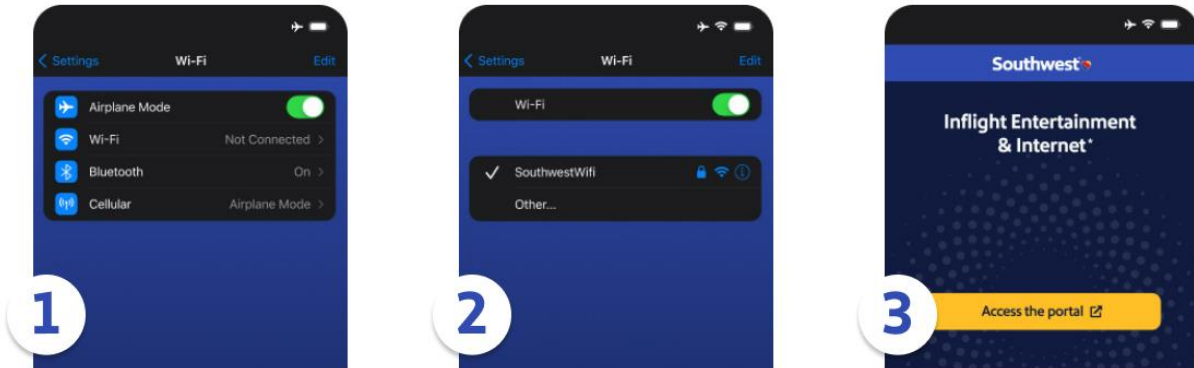




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On information and belief, Southwest passengers authenticate themselves on the SouthwestWiFi.com web portal to access in-flight Wi-Fi using on-board server(s). The authentication completes when the user enters their login credentials on the portal. Limited free Wi-Fi is available to passengers, and upgraded high-speed



U.S. Patent No. 7,324,469 (Claim 24)	
Claim(s)	Example Southwest Count 5 Systems and Services
	<p>WiFi is available to certain Southwest members or can be purchased.</p> <p><b>How to Get Connected</b> ^</p>  <p>1 Head to <b>Settings</b>. Turn on Airplane mode.</p> <p>2 Turn on Wi-Fi. Choose <b>SouthwestWiFi</b> from the WiFi network list.</p> <p>3 Tap Access the portal or open <b>SouthwestWiFi.com</b> in your browser directly.</p> <p>Source: <a href="https://www.southwest.com/inflight-entertainment-portal/">https://www.southwest.com/inflight-entertainment-portal/</a>.</p> <p><b>During your flight</b></p> <p>How do I access Inflight Entertainment and Internet options? ▾</p> <p>How do I access Free Internet benefits? ▴</p> <p>Our A-List Preferred Members and Business Select Customers have access to Free Internet. From the hamburger menu, select "A-List Preferred &amp; Business Select" to authorize your device using either your Rapid Rewards information or flight confirmation number.</p> <p>Free Internet may be authorized by A-List Preferred Members and Business Select Customers on up to three devices per flight on their day of travel. A-List Preferred Members who purchase a Business Select Fare may authorize up to six devices per flight on their day of travel.</p> <p>Source: <a href="https://www.southwest.com/inflight-entertainment-portal/">https://www.southwest.com/inflight-entertainment-portal/</a>.</p>

U.S. Patent No. 7,324,469 (Claim 24)	
Claim(s)	Example Southwest Count 5 Systems and Services
[24.d] a web-ready device operatively coupled to the at least one router, the web-ready device having a browser application operating thereon for accessing the Internet;	<p>On information and belief, the Southwest Count 5 Systems and Services include a web-ready device operatively coupled to the at least one router, the web-read device having a browser application operating thereon for accessing the Internet.</p> <p>On information and belief, Southwest enables access to onboard WiFi through seatback and/or user devices that include a browser application for Internet accessibility.</p> <div> <p><b>How to Get Connected</b> ^</p>  <p><b>1</b> Head to <b>Settings</b>. Turn on Airplane mode.</p> <p><b>2</b> Turn on Wi-Fi. Choose <b>SouthwestWiFi</b> from the WiFi network list.</p> <p><b>3</b> Tap Access the portal or open <b>SouthwestWiFi.com</b> in your browser directly.</p> </div> <p>Source: <a href="https://www.southwest.com/inflight-entertainment-portal/">https://www.southwest.com/inflight-entertainment-portal/</a>.</p> <div> <p><b>Free Entertainment<sup>1</sup></b></p> <p>We've got something for everyone. With a wide variety of new releases and long-time Customer favorites, all movies are viewable right in your browser - no downloads or sign-ups required!</p> </div> <p>Source: <a href="https://www.southwest.com/inflight-entertainment-portal/">https://www.southwest.com/inflight-entertainment-portal/</a>.</p>

U.S. Patent No. 7,324,469 (Claim 24)	
Claim(s)	Example Southwest Count 5 Systems and Services
	<p style="text-align: center;"><b>Stay Connected<sup>1</sup></b></p> <p style="text-align: center;">Keeping you connected to what matters to you—even when you're in the air. Access the portal to enjoy free texting<sup>2</sup> and \$8 Internet.<sup>4</sup></p> <div style="display: flex; justify-content: space-around;"> <div style="width: 45%;"> <p style="text-align: center;"><b>Free Texting</b></p> <div style="text-align: center;">  </div> <p>Keep those texts flying with <b>iMessage</b> and <b>WhatsApp</b> on your personal device. Visit the Texting page in Portal to activate service.</p> </div> <div style="width: 45%;"> <p style="text-align: center;"><b>\$8 Internet</b></p> <div style="text-align: center;">  </div> <p>Go online to check email, browse social media, or snag a dinner reservation for just \$8 (<b>free</b> for our A-List Preferred Members and Business Select Customers) per device from takeoff to landing.</p> <div style="border: 1px solid #ccc; padding: 5px; margin-top: 10px;"> <p><b>Note:</b> In order to provide a better experience, we may prohibit access to certain high-bandwidth applications, websites, and video conferencing services. In consideration of the public environment onboard we may also restrict potentially offensive online content.</p> </div> </div> </div> <p>Source: <a href="https://www.southwest.com/inflight-entertainment-portal/">https://www.southwest.com/inflight-entertainment-portal/</a>.</p>
[24.e] wherein the satellite dish, at least one router and the subscriber access unit are located in a remote location a experiencing a relatively high volume of transient traffic;	On information and belief, the Southwest Count 5 Systems and Services include a satellite dish, at least one router, and a subscriber access unit, where the satellite dish, at least one router and the subscriber access unit are located in a remote location a experiencing a relatively high volume of transient traffic.

## U.S. Patent No. 7,324,469 (Claim 24)

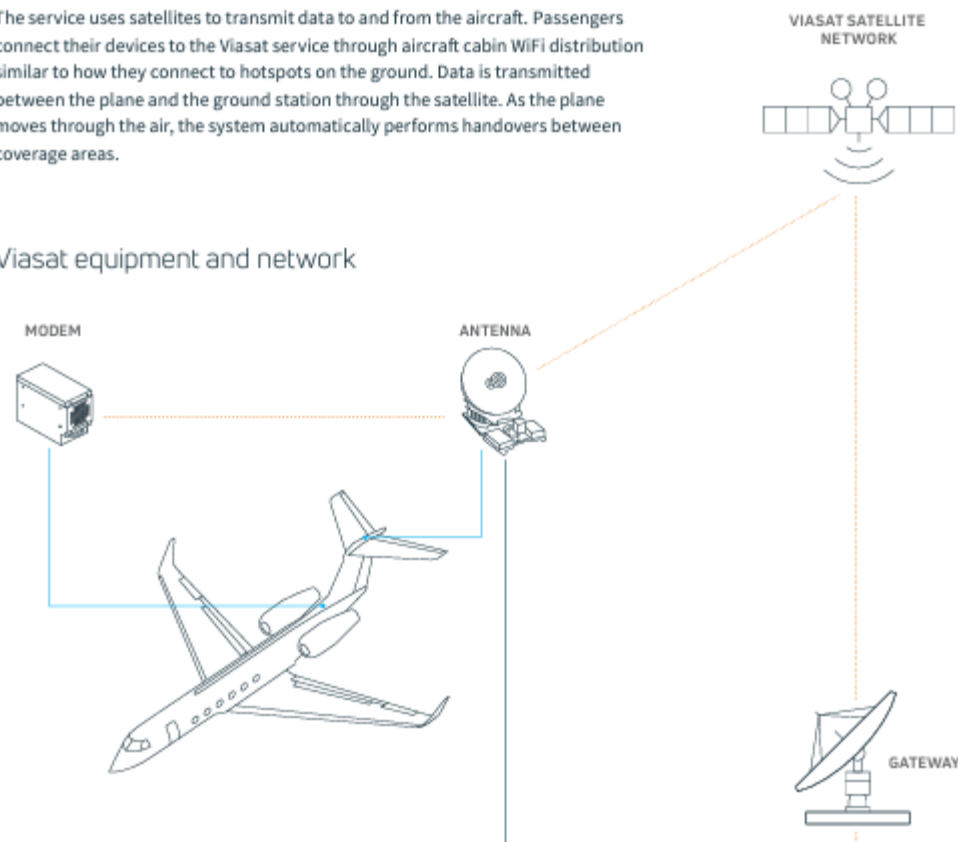
## Claim(s)

## Example Southwest Count 5 Systems and Services

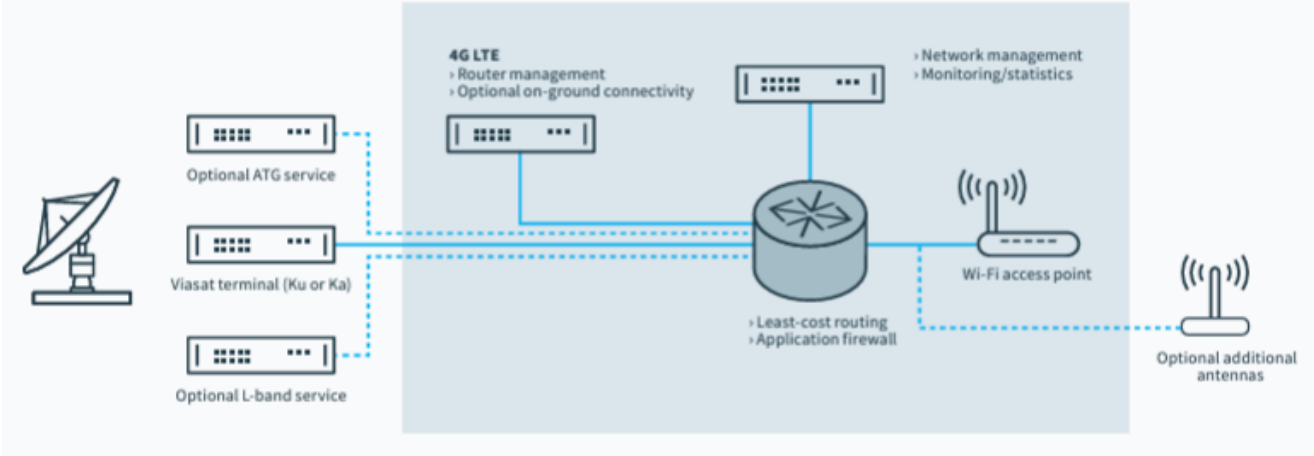
**How it works**

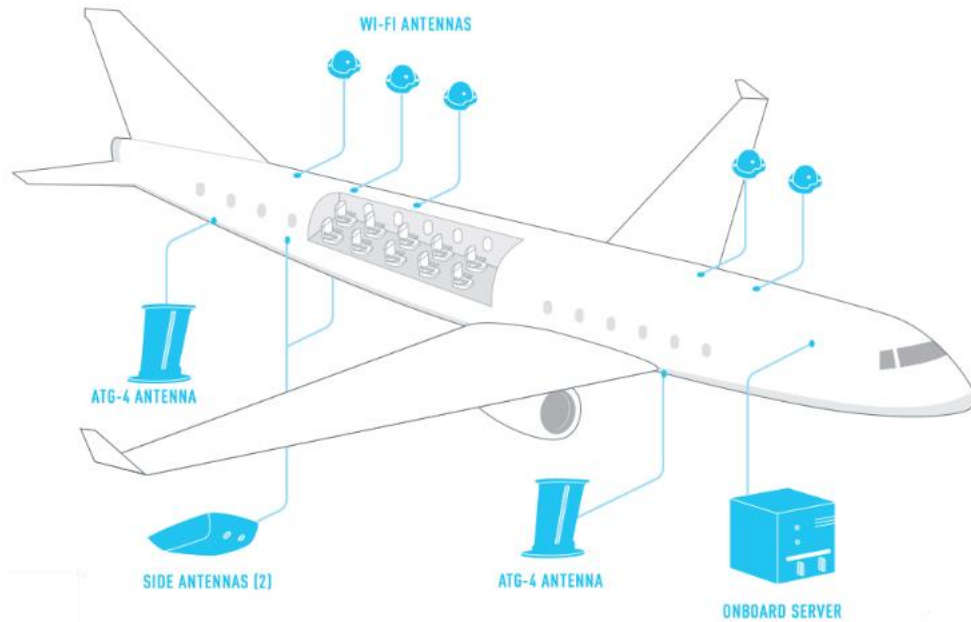
The service uses satellites to transmit data to and from the aircraft. Passengers connect their devices to the Viasat service through aircraft cabin WiFi distribution similar to how they connect to hotspots on the ground. Data is transmitted between the plane and the ground station through the satellite. As the plane moves through the air, the system automatically performs handovers between coverage areas.

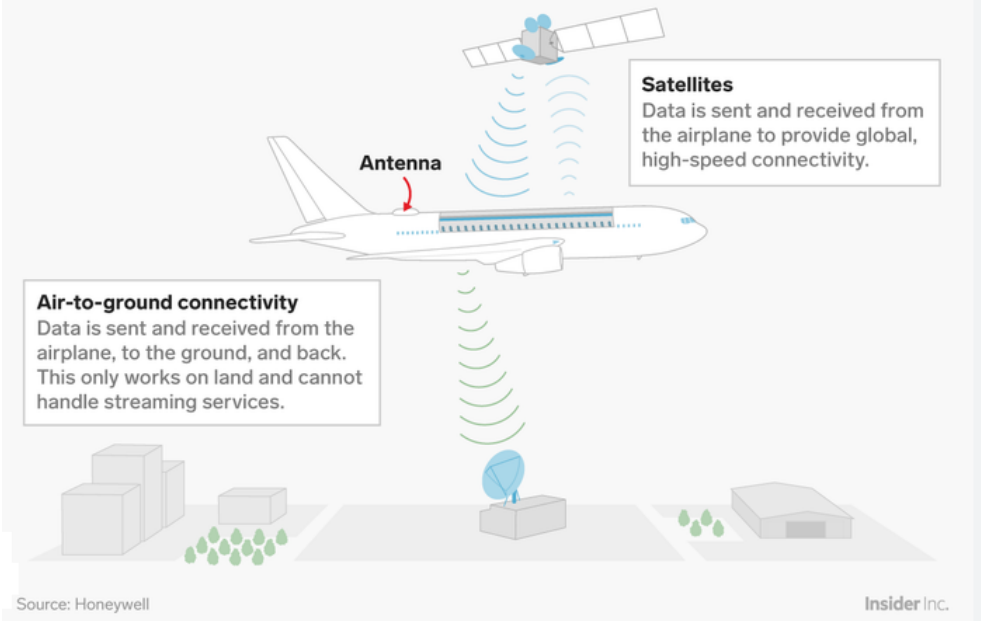
## Viasat equipment and network



Source: [https://www.viasat.com/content/dam/us-site/aviation/documents/932043\\_Global\\_Ku-band\\_Advanced\\_Brochure\\_016\\_web.pdf](https://www.viasat.com/content/dam/us-site/aviation/documents/932043_Global_Ku-band_Advanced_Brochure_016_web.pdf).

U.S. Patent No. 7,324,469 (Claim 24)	
Claim(s)	Example Southwest Count 5 Systems and Services
	 <p>The diagram illustrates a network architecture for a satellite-based system. On the left, a satellite dish icon is connected to three server racks. The top rack is labeled 'Optional ATG service', the middle rack is 'Viasat terminal (Ku or Ka)', and the bottom rack is 'Optional L-band service'. These racks are connected via dashed lines to a central router. The router is connected to a '4G LTE' block, which includes 'Router management' and 'Optional on-ground connectivity'. The router also connects to a 'Wi-Fi access point' and an 'Optional additional antennas'. The router is labeled with 'Least-cost routing' and 'Application firewall'. The '4G LTE' block is further connected to a 'Network management' and 'Monitoring/statistics' block.</p> <p>Source: <a href="https://www.viasat.com/content/dam/us-site/aviation/documents/Viasat_Select_Router-datasheet.pdf">https://www.viasat.com/content/dam/us-site/aviation/documents/Viasat_Select_Router-datasheet.pdf</a>.</p>

U.S. Patent No. 7,324,469 (Claim 24)	
Claim(s)	Example Southwest Count 5 Systems and Services
	 <p>The diagram illustrates an aircraft equipped with several communication systems. Labels with leader lines point to the following components: 'WI-FI ANTENNAS' (three small circular antennas on the upper fuselage), 'ATG-4 ANTENNA' (a large blue antenna on the left wing), 'SIDE ANTENNAS (2)' (two small blue antennas on the lower fuselage), 'ATG-4 ANTENNA' (a large blue antenna on the right wing), and 'ONBOARD SERVER' (a blue server rack unit in the tail section).</p> <p>Source: <a href="https://onezero.medium.com/what-makes-it-possible-to-browse-the-internet-at-35-000-feet-1afaea83eb5">https://onezero.medium.com/what-makes-it-possible-to-browse-the-internet-at-35-000-feet-1afaea83eb5</a>.</p>

U.S. Patent No. 7,324,469 (Claim 24)	
Claim(s)	Example Southwest Count 5 Systems and Services
	<p style="text-align: center;"><b>Two different ways WiFi works on airplanes</b></p>  <p>The diagram shows an airplane in flight. A satellite in orbit is connected to the airplane via blue wavy lines, representing global connectivity. A ground station on the ground is connected to the airplane via green wavy lines, representing air-to-ground connectivity. The ground station is shown with a dish antenna and is connected to a network of buildings and trees.</p> <p><b>Satellites</b> Data is sent and received from the airplane to provide global, high-speed connectivity.</p> <p><b>Air-to-ground connectivity</b> Data is sent and received from the airplane, to the ground, and back. This only works on land and cannot handle streaming services.</p> <p>Source: Honeywell</p> <p style="text-align: right;">Insider Inc.</p> <p>Source: <a href="https://www.businessinsider.com/how-airplane-wifi-works-2018-9">https://www.businessinsider.com/how-airplane-wifi-works-2018-9</a>.</p>

U.S. Patent No. 7,324,469 (Claim 24)																																		
Claim(s)	Example Southwest Count 5 Systems and Services																																	
	<p style="text-align: center;"><b>Southwest Airlines fleet</b></p> <table> <tr> <th>Aircraft</th><th>In service</th><th>Orders</th><th>Passengers</th><th>Notes</th></tr> <tr> <td>Boeing 737-700</td><td>374</td><td>—</td><td>143</td><td>Launch customer and largest operator.<sup>[15]</sup> Older aircraft to be replaced by Boeing 737 MAX 7.</td></tr> <tr> <td>Boeing 737-800</td><td>205</td><td>—</td><td>175</td><td>To be replaced by Boeing 737 MAX 8.</td></tr> <tr> <td>Boeing 737 MAX 7</td><td>—</td><td>307</td><td>150<sup>[33]</sup></td><td>Deliveries begin in 2025.<sup>[34]</sup> To replace older Boeing 737-700s.<sup>[35]</sup></td></tr> <tr> <td>Boeing 737 MAX 8</td><td>239</td><td>166</td><td>175</td><td>Largest Boeing 737 MAX operator. To replace Boeing 737-700s.<sup>[35]</sup></td></tr> <tr> <td><b>Total</b></td><td><b>818</b></td><td><b>473</b></td><td></td><td></td></tr> </table> <p>Source: <a href="https://en.wikipedia.org/wiki/Southwest_Airlines_fleet">https://en.wikipedia.org/wiki/Southwest_Airlines_fleet</a>.</p>				Aircraft	In service	Orders	Passengers	Notes	Boeing 737-700	374	—	143	Launch customer and largest operator. <sup>[15]</sup> Older aircraft to be replaced by Boeing 737 MAX 7.	Boeing 737-800	205	—	175	To be replaced by Boeing 737 MAX 8.	Boeing 737 MAX 7	—	307	150 <sup>[33]</sup>	Deliveries begin in 2025. <sup>[34]</sup> To replace older Boeing 737-700s. <sup>[35]</sup>	Boeing 737 MAX 8	239	166	175	Largest Boeing 737 MAX operator. To replace Boeing 737-700s. <sup>[35]</sup>	<b>Total</b>	<b>818</b>	<b>473</b>		
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[24.f] wherein the user may authenticate the subscription account and access the Internet at the remote location by establishing a data connection between the web-ready device and the router.	<p>On information and belief, the Southwest Count 5 Systems and Services include WiFi where the user may authenticate the subscription account and access the Internet at the remote location by establishing a data connection between the web-ready device and the router.</p> <p>On information and belief, Southwest passengers authenticate themselves on the SouthwestWiFi.com web portal to access in-flight Wi-Fi. The authentication completes when the user enters their login credentials on the portal through seatback and/or user devices. Limited free Wi-Fi is available to passengers, and upgraded high-speed WiFi is available to certain Southwest members or can be purchased.</p>																																	



## U.S. Patent No. 7,324,469 (Claim 24)

## Claim(s)

## Example Southwest Count 5 Systems and Services

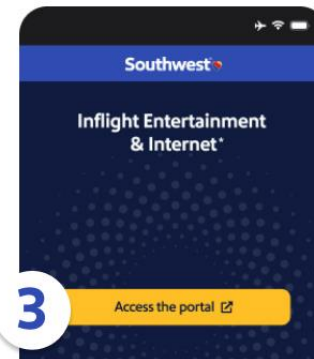
## How to Get Connected ^



Head to **Settings**.  
Turn on Airplane mode.



Turn on Wi-Fi.  
Choose **SouthwestWiFi** from the WiFi network list.



Tap Access the portal or open  
**SouthwestWiFi.com** in your browser directly.

Source: <https://www.southwest.com/inflight-entertainment-portal/>.

## During your flight

How do I access Inflight Entertainment and Internet options? ▾


How do I access Free Internet benefits? ▴

Our A-List Preferred Members and Business Select Customers have access to Free Internet. From the hamburger menu, select "A-List Preferred & Business Select" to authorize your device using either your Rapid Rewards information or flight confirmation number.

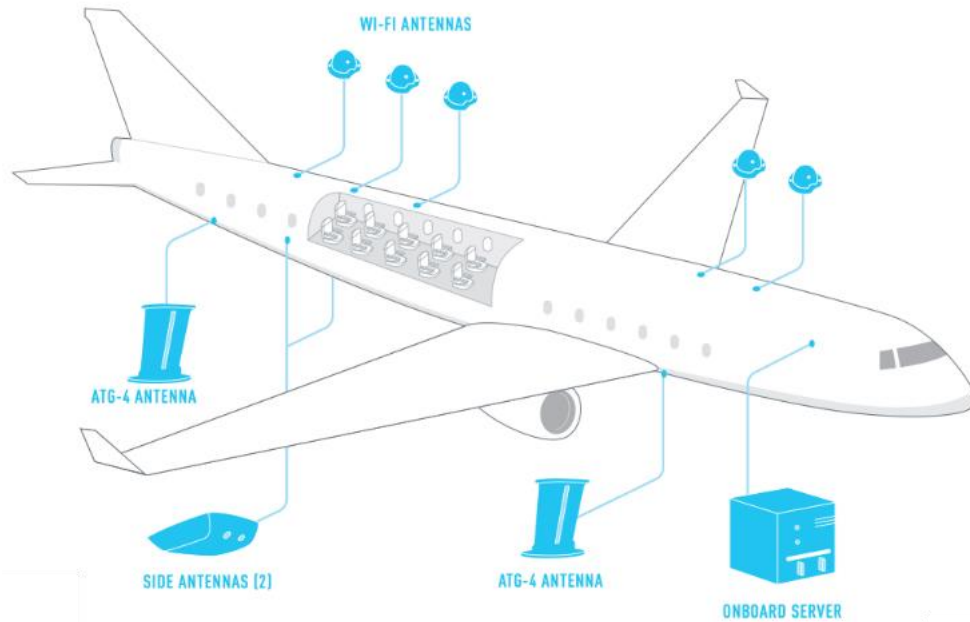
Free Internet may be authorized by A-List Preferred Members and Business Select Customers on up to three devices per flight on their day of travel. A-List Preferred Members who purchase a Business Select Fare may authorize up to six devices per flight on their day of travel.

Source: <https://www.southwest.com/inflight-entertainment-portal/>.

On information and belief, upon authentication the user may access the Internet through onboard WiFi, where a connection is established with onboard software and/or hardware including a router.

U.S. Patent No. 7,324,469 (Claim 24)	
Claim(s)	Example Southwest Count 5 Systems and Services
	<p><b>How to Get Connected</b> ^</p>  <p><b>1</b> Head to <b>Settings</b>. Turn on Airplane mode.</p> <p><b>2</b> Turn on Wi-Fi. Choose <b>SouthwestWiFi</b> from the WiFi network list.</p> <p><b>3</b> Tap Access the portal or open <b>SouthwestWiFi.com</b> in your browser</p> <p>Source: <a href="https://www.southwest.com/inflight-entertainment-portal/">https://www.southwest.com/inflight-entertainment-portal/</a>.</p> <p><b>Free Entertainment<sup>1</sup></b></p> <p>We've got something for everyone. With a wide variety of new releases and long-time Customer favorites, all movies are viewable right in your browser - no downloads or sign-ups required!</p> <p>Source: <a href="https://www.southwest.com/inflight-entertainment-portal/">https://www.southwest.com/inflight-entertainment-portal/</a>.</p>

U.S. Patent No. 7,324,469 (Claim 24)	
Claim(s)	Example Southwest Count 5 Systems and Services
	<p style="text-align: center;"><b>Stay Connected<sup>1</sup></b></p> <p style="text-align: center;">Keeping you connected to what matters to you—even when you're in the air. Access the portal to enjoy free texting<sup>2</sup> and \$8 Internet.<sup>4</sup></p> <div style="display: flex; justify-content: space-around;"> <div style="width: 45%;"> <p style="text-align: center;"><b>Free Texting</b></p> <div style="text-align: center;">  </div> <p>Keep those texts flying with <b>iMessage</b> and <b>WhatsApp</b> on your personal device. Visit the Texting page in Portal to activate service.</p> </div> <div style="width: 45%;"> <p style="text-align: center;"><b>\$8 Internet</b></p> <div style="text-align: center;">  </div> <p>Go online to check email, browse social media, or snag a dinner reservation for just \$8 (<b>free</b> for our A-List Preferred Members and Business Select Customers) per device from takeoff to landing.</p> <div style="background-color: #f0f0f0; padding: 10px; margin-top: 10px;"> <p><b>Note:</b> In order to provide a better experience, we may prohibit access to certain high-bandwidth applications, websites, and video conferencing services. In consideration of the public environment onboard we may also restrict potentially offensive online content.</p> </div> </div> </div> <p>Source: <a href="https://www.southwest.com/inflight-entertainment-portal/">https://www.southwest.com/inflight-entertainment-portal/</a>.</p>

U.S. Patent No. 7,324,469 (Claim 24)	
Claim(s)	Example Southwest Count 5 Systems and Services
	 <p>Source: <a href="https://onezero.medium.com/what-makes-it-possible-to-browse-the-internet-at-35-000-feet-1afaea83eb5">https://onezero.medium.com/what-makes-it-possible-to-browse-the-internet-at-35-000-feet-1afaea83eb5</a>.</p> <p>On information and belief, Southwest offers WiFi solutions on its airplanes that support satellite-based WiFi.</p>

U.S. Patent No. 7,324,469 (Claim 24)			
Claim(s)	Example Southwest Count 5 Systems and Services		
		Anuvu Legacy	Anuvu Upgraded
	Improved Speeds and Reliability	✗	✓
	Streaming (when authenticated for Internet)	✗	✓
	Device Swap	✗	✗
	Free Entertainment, Texting, and Flight Tracker	✓	✓
	<p>Source: <a href="https://www.swamedia.com/southwest-stories/wifi-modernization-first-viasat-aircraft-enters-service-MC5XTXWTTLWNESJDQR4LZQBID12I">https://www.swamedia.com/southwest-stories/wifi-modernization-first-viasat-aircraft-enters-service-MC5XTXWTTLWNESJDQR4LZQBID12I</a>.</p> <div>DOES SOUTHWEST USE VIASAT?</div> <p>Yes. Southwest airlines announced in March 2023 that new aircraft with the airline will come with factory-installed Wi-Fi connectivity powered by Viasat. The Ka-band connectivity will offer faster, reliable Wi-Fi network connections for Southwest passengers. Viasat currently offers In-Flight Connectivity services to Delta Air Lines, JetBlue, American and United. The first Viasat-equipped aircraft entered service in March 2023 for various North American routes. Viasat is proud to have been selected as the provider in this partnership.</p> <p>The connectivity will use three large Ka-band satellites, Viasat-1, Viasat-2 and the recently launched Viasat-3 once it completes in-orbit testing, which is expected to be late summer or the fall of 2023. Viasat is a global communications company that provides high-speed satellite internet and other communication services. It operates a satellite network that delivers broadband internet access to residential, commercial, and government customers, particularly in areas where traditional wired internet infrastructure is limited or unavailable.</p> <p>Source: <a href="https://www.rsinc.com/does-southwest-use-viasat.php">https://www.rsinc.com/does-southwest-use-viasat.php</a>.</p>		

U.S. Patent No. 7,324,469 (Claim 24)	
Claim(s)	Example Southwest Count 5 Systems and Services
	<p>Our hybrid satellite network combines our own satellites with capacity on over 50 third-party satellites, providing scalable capacity, reliability and redundancy, and cost-effective solutions for our customers.</p> <p>As the industry pioneer in regional <b>inflight Connectivity</b> and gigabit-class cruise ship connectivity, Anuvu has continuously invested in new technologies to keep pace with end-user expectations. We recognize the importance of reliable, fast, global connectivity for our customers around the world. Our hybrid network, consisting of high-throughput geostationary satellites and 4G/5G mobile connectivity, builds on the industry's first and most capable SD-WAN platform optimized for aviation and maritime applications.</p> <p><b>96%</b> Anuvu's world satellite coverage</p> <p><b>1000+</b> Aircraft connected - the largest domestic single-aisle fleet in the world</p> <p>Source: <a href="https://www.anuvu.com/our-portfolio/connectivity">https://www.anuvu.com/our-portfolio/connectivity</a>.</p>